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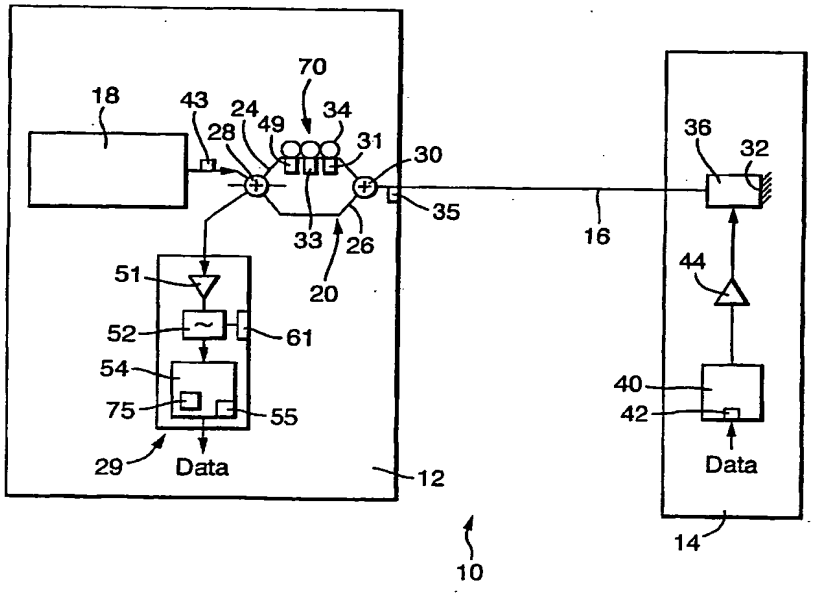
(54) Title: SECURE OPTICAL COMMUNICATION



(57) Abstract: The present invention relates to a secure optical communication scheme. The differential delay D in an unbalanced Mach-Zehender interferometer results in two copies of the optical source signal at a remote phase modulator separated in time by D. As D is much bigger than the coherence time source, the two copies of the signal are effectively uncorrelated both signals are phase-modulated by the remote sender's data and returned to the unbalanced interferometer. The phase modulator will be converted into amplitude modulation by the auction of the interferometer.

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